## IN THE ABSTRACT:

The Abstract as amended below with a replacement Abstract shows added text with underlining and deleted text with strikethrough.

Please DELETE the Abstract in its entirety and substitute the attached new Abstract.

An object of the invention is to provide an optical dispersion monitoring apparatus and an optical dispersion monitoring method, are capable of monitoring dispersion accurately with a simple construction, and to in an optical transmission system using the same. To this end, the optical dispersion monitoring apparatus includes comprises: a light receiving section converting an input optical signal into an electrical signal, a signal transition position detecting section detecting the voltage level of a waveform of the output signal from the light receiving section, at a crossing point of a rising edge and a falling edge, and a cumulative dispersion information extracting section comparing the voltage level at the crossing point with a reference signal to extracts cumulative dispersion information.